ABSTRACT

A process for producing microcrystalline cellulose. The process comprising the following steps:

a) preparation of a pulp by repulping,
b) pressing of the pulp obtained in a),
c) decompaction of the pulp obtained in b),
d) feeding of the pulp obtained in c) into a pre-heated reactor,
e) cooking of the pulp at a temperature, a time and a pressure allowing to obtain a pulp having a desired degree of polymerisation,
f) cooling and partial controlled depressurisation of the reactor by purging the reactor, followed by a water injection into the jacket and directly into the reactor,
g) filtering the pulp obtained in f),
h) bleaching of the pulp obtained in g), and
i) drying the pulp obtained in h).

The process allows the application of a controlled depressurisation in step f), which in turn allows to keep the natural texture of the fibers and to obtain a cellulose having a low degree of polymerization.